RCRA FACILITY ASSESSMENT
Visual Site Inspection

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Region 3
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VISUAL SITE INSPECTION SUMMARY

On March 28, 1994, a Visual Site Inspection (VSI) was conducted at the Dico Oil Facility. Identified as areas of high concern based on visual observation of possible extensive soil contamination were:

1. The tank farm area;

2. Trench area within tank farm;

1.0 INTRODUCTION

The Visual Site Inspection (VSI) is an integral part of the RCRA Facility Investigation (RFA) and is done to verify and determine the locations of all solid waste management units (SWMUs), potential SWMUs and Areas of concern (AOC). During the VSI, the entire facility will be visually inspected for evidence of releases of hazardous waste or constituents that have occurred. The term SWMU includes "any unit at the facility from which hazardous constituents might migrate, irrespective of whether the units were intended for the management of solid and/or hazardous waste" (Title 22, California Code of Regulations, section 66260.10).

The evidence gathered during the VSI will confirm and/or support the information gathered during the Preliminary Report (PR) in the way of releases at specific locations in the Facility. However, in some cases, new SWMUs or AOC may be identified during the VSI that were not previously identified in the PR. Such observations will be noted and included in the RFA report.

At the conclusion of the VSI, there will be one of three recommendations made for sampling. The recommendations include sampling to be performed in certain areas of the Facility; suggest an investigation be done without conducting, or recommend no further action be taken at a particular area in the Facility.

2.0 BACKGROUND

On March 15, 1994, a Preliminary Review was completed as part of a RCRA Facility Assessment Report for Dico Oil Corporation site. In this report, based on the information gathered it was recommended that a visual site inspection be performed at the Facility to assess the potential for the release of hazardous waste constituents from SWMUs and to identify other potential sources of releases. A one day Visual Site Inspection was subsequently conducted on March 28, 1994 at the Dico Oil Corporation facility.

3.0 OBSERVATIONS

The observations made during the Visual Site Inspection (VSI) conducted on March 28, 1994 will be areas identified on the site map. For reference see Site Map and Table #1.

3.1 SWMU #1 - Tank T1

The perimeter of this Facility is completely gated. The entire tank farm area is 5,280 sq.ft. in size. The width of the Facility moving in a east to west direction is 97.3 feet. There are also hazardous waste signs posted on the entrance to the Facility.

During the VSI all the tanks used for hazardous waste treatment and storage were identified and discussed in the (PR). An inspection of this tank which was constructed during the 1930's and has been operating for over forty years. The capacity of the tank is 21,149 gallons. The tank is insulated but has not operated the heating system for over fifteen years. It is currently operating as a treatment/storage tank for used oil. The insulation which surrounded the tank was in fair condition, there were no visible holes or cracks. It is closed to the atmosphere and has a roof on it.

The roof has a port hole which vents to the atmosphere and is cone shaped for rain water run off. There were manual release control valves on the tank. No gross leakage, major corrosion, cracks or deterioration was visible. There were only a few small rust spots on the insulation. The base of the tank was surrounded by crushed rock and gravel which acts as secondary containment for the entire tank farm. The tank is an on ground tank and is not bolted to the ground.

Historically, there has been no secondary containment systems for tanks at the Dico Oil Corporation. The facility has not submitted any documentation as part of their operation plan to upgrade or replace the tanks. The gravel surrounded the tank had minor oil stains. The tank has no documented tank assessment done and due to the age and condition of the tank, it probably would not pass for integrity testing. Mr. Cowan, the owner/operator of the facility could not give me a date as to when the tank was last cleaned out for sludge.

3.2 SWMU #2 - Tank T2

An inspection of this tank which was constructed during the 1930's has been operating for over forty years. The capacity of the tank is 21,149 gallons. It is currently operating as a treatment/storage tank for used oil. The visual inspection of the riveted tank revealed no gross

leakage was occurring but there was some external deterioration of the tank. Some blisters, buckles, external corrosion, rust spots and cracks in the seams and pipes were evident. The coating or wrap had been damaged by spills. The pipes and valves had evidence of leaks. The tank had evidence of oil spills on the ground.

Historically, there has been no secondary containment systems for tanks at the Dico Oil Corporation. The facility has not submitted any documentation as part of their operation plan to upgrade or replace the tanks. The base of the tank surrounded by crushed rock and gravel which acts as secondary containment for the entire tank farm, had minor oil stains due to pipes and valves leaking. The tank has no documented tank assessment done and due to the age and condition of the tank, it probably would not pass for integrity testing. Mr. Cowan, the owner/operator of the facility could not give me a date as to when the tank was last cleaned out for sludge.

The roof has a port hole which vents to the atmosphere and is cone shaped for rain water run off. There were manual release control valves on the tank. No gross leakage, corrosion, buckles, cracks and external deterioration was visible. There were only a few small rust spots on the insulation. The tank is not bolted to the ground and does not have a cone bottom.

3.3 SWMU #3 - TANK T3

An inspection of this tank which was constructed during the 1930's has been operating for over forty years. The capacity of the tank is 28,071 gallons. It is currently operating as a treatment/storage tank for used oil. The visual inspection of the riveted tank revealed some leakage was occurring to the ground and there was some external deterioration of the tank. Some blisters, buckles, external corrosion, rust spots and cracks in the seams and pipes were evident. Visible deterioration of the protective coating or wrap had been damaged by spills. The pipes and valves had evidence of leaks. The tank had evidence of oil spills on the ground.

Historically, there has been no secondary containment systems for tanks at the Dico Oil Corporation. The facility has not submitted any documentation as part of their operation plan to upgrade or replace the tanks. The gravel surrounding the tank had minor oil stains due to pipes and valves leaking. The tank has no documented tank assessment done and due to the age and condition of the tank, it probably would not pass for integrity testing. Mr. Cowan, the owner/operator of the facility could not give me a date as to when the tank was last cleaned out for sludge.

The roof has a port hole which vents to the atmosphere and is cone shaped for rain water run off. There were manual release control valves on the tank. The base of the tank was surrounded by crushed rock and gravel which acts as secondary containment for the entire tank farm. None of the tanks located at the facility have cone bottoms or are bolted to the ground. There appeared

to be no tear in the hoses. This tank is near the area where PCB contaminated soil was found (SWMU # 17).

3.4 SWMU #4 - TANK T4

An inspection of this tank which was constructed during the 1930's has been operating for over forty years. The capacity of the tank is 42,198 gallons. It is currently operating as a treatment/storage tank for used oil. The visual inspection of the riveted tank revealed some leakage was occurring to the ground and there was some external deterioration of the tank. The tank had a visible hole in it and liquid was seeping out of it on to the ground. Some blisters, buckles, external corrosion, rust spots and cracks in the seams and pipes were evident. Visible deterioration of the protective coating or wrap had been damaged by spills. The pipes and valves had evidence of leaks. The tank had evidence of oil spills on the ground.

Historically, there has been no secondary containment systems for tanks at the Dico Oil Corporation. The facility has not submitted any documentation as part of their operation plan to upgrade or replace the tanks. The gravel surrounded the tank had some oil stains due to pipes, valves, and the hole in the tank. The tank has no documented tank assessment done and due to the age and condition of the tank, it probably would not pass for integrity testing. Mr. Cowan, the owner/operator of the facility could not give me a date as to when the tank was last cleaned out for sludge.

The roof has a port hole which vents to the atmosphere and is cone shaped for rain water run off. There were manual release control valves on the tank. The nozzles and valves had some leakage, corrosion, and deterioration.

The base of the tank was surrounded by crushed rock and gravel which acts as secondary containment for the entire tank farm. None of the tanks located at the facility are bolted to the ground or have cone bottoms. There appeared to be no tear in the hoses. This tank sits above the trench area where a documented release of PCB contaminated soil was found (SWMU # 10). The tank had a green solution in the catch tray that I was unable to identify. Therefore, due to a documented release near this tank and being discovered to be leaking during the VSI, an area at the base of the tank will be selected for sampling during the VSI sampling activity.

3.5 SWMU #5 - TANK TA5

An inspection of this tank which was constructed during the 1930's has been operating for over forty years. The capacity of the tank is 8,663 gallons. This tank is not currently operating as treatment/storage tank for used oil. The tank was taken out of service in 1992 due to several

leaks from holes surrounding the base of the tank. The visual inspection of the riveted tank revealed extensive leakage had occurred at the base. There was some external deterioration of the tank. Some blisters, buckles, external corrosion, rust spots and cracks in the seams and pipes were evident. Visible deterioration of the protective coating or wrap. The inspection of the pipes and valves indicated no obvious appearance of leaks in the past. The tank had evidence of oil spills on the ground.

Historically, there has been no secondary containment systems for tanks at the Dico Oil Corporation. The facility has not submitted any documentation as part of their operation plan to upgrade or replace the tanks. The tank has no documented tank assessment done and due to the age and condition of the tank, it probably would not pass for integrity testing. Mr. Cowan, the owner/operator of the facility could not give me a date as to when the tank was last cleaned out for sludge prior to being taken out of service.

The roof has a port hole which vents to the atmosphere and is cone shaped for rain water run off. There were manual release control valves on the tank. The base of the tank was surrounded by crushed rock and gravel which acts as secondary containment for the entire tank farm. The tank is not bolted to the ground and does not have a cone bottom. There appeared to be no tear in the hoses. Therefore due to this tank having a history of leaks an area at the base of this tank will be selected for sampling during the VSI sampling activity.

3.6 SWMU #6 - TANK TB

An inspection of this tank which was constructed during the 1930's has been operating for over forty years. The capacity of the tank is 21,149 gallons. It is currently operating as a treatment/storage tank for used oil. The visual inspection of the riveted tank revealed some leakage was occurring to the ground and there was some external deterioration of the tank. Some blisters, buckles, external corrosion, rust spots and cracks in the seams and pipes were evident. Visible deterioration of the protective coating or wrap. The pipes and valves had evidence of leaks. The tank had evidence of oil spills on the ground.

Historically, there has been no secondary containment systems for tanks at the Dico Oil Corporation. The facility plans to upgrade their tank system but has not submitted any documentation as part of their operation plan to upgrade or replace the tanks. The gravel surrounding the tank had minor oil stains due to pipes and valves leaking. There appeared to be no tear in the hoses.

The tank has no documented tank assessment done and due to the age and condition of the tank, it probably would not pass for integrity testing. Mr. Cowan, the owner/operator of the facility could not give me a date as to when the tank was last cleaned out for sludge.

The roof has a port hole which vents to the atmosphere and is cone shaped for rain water run off. There were manual release control valves on the tank. The base of the tank was surrounded by crushed rock and gravel which acts as secondary containment for the entire tank farm.

3.7 SWMU #7 - GUN BARREL TANK/STORAGE TANK

During the VSI it was discovered that SWMU #7 which had been identified in Dico Oil Corporation's Operation Plan as "Gun Barrel Tank" was just another name when referring to Tank TA. Therefore this SWMU will be deleted from the list of SWMUs that were previously identified in the Preliminary Review.

3.8 & 3.9 SWMU #s 8-9 - TANK PIT AREA 1 AND TANK PIT AREA 2 from Removal of Underground Storage Tanks

The area within the tank farm where two under ground storage half-tanks were located has some vegetation on it and is presently covered with rock and gravel. The capacity of the tanks were 10,500 gallons each. The tanks stored crude oil, residual and cracked fuel oils, used oil, diesel fuels, jet type fuels and waste oils. This area is 469.2 square feet (ft^2). The soil in this area has been documented with a release of total petroleum hydrocarbons containing high concentrations. The soil underneath the gravel appeared to be fill it was dark tan color and had no odor. The two under ground half-tanks that were located in this area were removed due to the discovery of the tanks leaking. The tanks were removed in 1987 and 1988 in accordance with requirements of the Waste Management Division, Los Angeles County Public Works. The tanks were documented to have heavy corrosion with holes and extensive deterioration causing a potential subsurface threat. Due to these tanks discovered to be leaking this area was selected for sampling during the sampling activity for the VSI.

3.10 SWMU #10 - TRENCH WITHIN TANK FARM

The trench within the tank farm is approximately 412.05 sq.ft. and two thirds of the trench is rectangular in shape the other one third is triangular shaped. According to Dick Cowan the owner/operator the trench was dug approximately in 1983 and created to act a temporary second containment to facilitate run off and oil spillage flow from the tank farm. Parts of the trench are lined with aluminum siding which acts a barrier along the walls of the trench. The aluminum is 2.2 feet high and covers all the sides of the trench except the south side within the trench. The total height of the trench is approximately 3.1 feet.

There is also a small waste oil tank that can hold approximately 110 gallons which is located next to the loading/unloading area (SWMU #12) and sits within the trench and is used for waste oil drippings from the trucks. The small tank is sitting on a concrete pad contained within the trench, is approximately 17.7 feet from the edge of trench. The concrete pad is 71.5 ft^2 in size.

A documented release of polychlorinated biphenyl (PCBs) found within the trench was identified in an inspection conducted by the Department of Toxic Substances Control. In a previous inspection report dated 1993 the analysis results of two soil samples revealed one sample contained a level of 3500 ppm PBCs. A repeat sample from the same area in the trench produced an analytical result of 4400 ppm of PCBs.

The trench has a small amount of liquid located within the bottom and the sides have oil stains located beneath tanks T2, T3 and T4 (SWMU #s 2, 3, and 4 respectively). It appeared that some of the contaminated soil had been excavated from the trench due to two fifty-five gallon drums of soil contained with the drum storage area (SWMU #15). Mr. Cowan the owner/operator stated that some of the PCB contaminated soil had been previously removed from the site under manifest. Therefore due to a documented release and a visual inspection within the trench area, it was chosen for sampling during the VSI sampling activity.

3.11 SWMU #11 - Berm Surrounding Tank Farm

A dirt berm of soil surrounds the entire tank farm. The berm contains approximately 280.8 yd^3 of soil and is covered with visquene throughout the entire perimeter to control rain run off and used oil spillage should it occur. A portion of the soil on the berm came from the soil that was dug out to create the trench within the tank farm (SWMU #10).

According to an inspection report dated December 12, 1993 (revised) a documented release of soil with high concentrations of Total Petroleum Hydrocarbon (TPH) was placed on the berm. This information was contained within a report, describing a sampling activity which was conducted by the Precision Tank Company in June 1988 in the Tank Pit Areas (SWMU # 8 & 9) where the under ground storage half-tanks were located. The analysis results revealed a sample which was collected at a depth of 14.5 feet from the area contained 945.3 ug/g of TPH. This soil which was excavated from the under ground tank area was placed on the berm. Therefore, since the berm contains soil that was documented to have high concentrations of TPH contamination, this area was selected to be sampled during the VSI sampling activity.

poor summary
Also PCB data from
DHS 12/89 to 180 ppm.

3.12 SWMU #12 - TRUCK LOADING AND UNLOADING AREA

The facility operates a concrete truck loading and unloading area. The loading/unloading area was constructed in 1993. This area is approximately 1,902.6 sq.ft. The loading/unloading area contains a cement berm which is .6 feet high and is located on both sides. The area contains a sump and is also equipped with hoses that connect to facility pipes for the purpose of transferring the used to and from tanker trucks. The sump contained within this area is 6.76 ft^2. in size. The area is operated in a one way direction.

The loading/unloading area was in good condition and contained no visible cracks. The hoses that are part of the piping system (SWMU #13) used to load and off-load waste oil are color coded green and red, respectively. There is also a small waste oil tank used for spills, that can hold approximately 110 gallons of oil, which is located next to the loading/unloading pad and sits within the trench (SWMU # 10) on a cement pad. The tank is used for waste oil drippings from the trucks.

3.13 SWMU #13 - WASTE PILE OF SOIL

The waste pile of soil that was documented in an inspection report that was prepared by the Department of Toxic Substances Control indicated that a waste pile of soil had been located at the facility. The report did not specify any details as to the amount or purpose of the soil being held at the facility. During the VSI Dick Cowan, Owner/Operator of the facility did state that a waste pile of soil had previously been stored at the facility but was removed as of 3/30/94. The facility will provide documentation for when the soil was removed from the facility. Therefore due to the waste pile of soil already being removed from the facility during the VSI, no additional information will be obtained or evaluated for this SWMU.

likely referencing the remaining soil pile from 6/88 UST excavations after much already spread across west fence line and berm.

3.14 SWMU #13 - PIPING SYSTEM

The pipelines throughout the facility are concentrated within the tank farm area. There is roughly 2400 feet of piping located throughout the Facility. All major waste is moved by pipeline within this facility as well as all transfers of oil to and from tank trucks occur. The piping and fittings were all carbon steel 900. The piping at the facility is the original piping that was installed when the facility was built except for that filtering system which was installed about five years ago. All the pipes at the facility are not in use at this time.

The pipes and valves are controlled manually. The inlet and outlet pipes are color coded green and red, respectively in order for identification purposes. According to an inspection report

prepared by the Department of Toxics Substances Control dated 12/93 (revised) it stated that due to poor housekeeping some of the pipes especially those connected directly to the tanks were all found to be leaking or have leaked oil on to the ground. The overall piping was in fair condition and some of the piping located throughout the facility was observed to be leaking. Due to the age of the pipes system it is not certain if it would pass integrity testing.
Historically, there has been no secondary containment systems for piping or tanks at the Dico Oil Corporation. The owner/operator Dick Cowan stated that the facility plans to upgrade their tank system and ancillary equipment but has not to date submitted any documentation as part of their operation plan to upgrade or replace the tanks and ancillary equipment.

3.15 SWMU #15 - HAZARDOUS WASTE DRUM STORAGE AREA

The facility has a hazardous waste/materials drum storage area located near the west side of the facility. The area has been in operation since 1987. The 556.85 sq.ft. area is square and is was built for drum storage. The drum storage area is not covered and has a cement padded floor that covers the majority of the area. There were 10 fifty-five gallon drums stored in the area during the VSI. Two of the ten drums contained PCB's contaminated soil which had been removed from the trench area (SWMU # 10). The other eight drums contained soil from spills mixed with absorbent, oily rags, greasy sludge and the sump generated waste. There were also four fifty gallon drums of emulsifying agent on the site that were located on the east side of the loading/unloading area (SWMU # 12).

An inspection report prepared by the Department of Toxics Substances Control dated December 12,1993 (revised) stated that the facility failed to obtain a hazardous waste storage permit or grant of authorization from the Department to operate a drum storage area. Since this area has a partial concrete pad it was not chosen for sampling.

3.16 SWMU #16 - LABORATORY/SATELLITE ACCUMULATION AREA

The laboratory and satellite accumulation area is contained in a building that is covered. Laboratory wastes are accumulated and stored for less than ninety (90) days in the laboratory area. The laboratory analysis that is done on the incoming loads of used oil are: Chlordetect for halogens; gravity; BS&W; temperature and flash point. The laboratory analysis for the out going loads of recycled oil are performed by a certified laboratory to determine if oil meets the recycled oil standards. No sampling activity will be conducted in this area.

3.17 & 3.18 SWMU # 17 & 18 - PCB SOIL CONTAMINATION AREAS

According to an Inspection Report dated 12/23/93 (revised) there are two areas within the site boundaries that have been identified through soil sampling activity to have been contaminated with polychlorinated biphenyl (PCBs). The areas that have documented releases that were confirmed through sampling was the soil located in the trench area (SWMU #10) located near Process Tank T4 (SWMU #4) and soil located on the west side of the driveway on-site. – which came from 88' UST excavation

The soil sampling activity conducted by the Department during an inspection conducted in January 1990 documented that soil samples collected on the west side of the driveway on-site at the facility contained levels of PCBs ranging from 160 to 180 ppm. The soil sampling activity conducted by the Department during an inspection conducted September 1993, confirmed the soil samples collected within the trench area produced analytical results of 4400 ppm and 3500 ppm PCBs.

During the VSI two, fifty-five gallon drums of PCB contaminated soil was stored in the Drum Storage Area (SWMU #15). Dick Cowan stated that some of the PCB contaminated soil had been removed from the facility prior to our visit. Therefore, since a documented release to soil has occurred in two different areas of the facility, one of these areas was chosen for sampling during the VSI sampling activity.

3.19 SWMU # 19 - SUMP in LOADING/UNLOADING AREA

This Solid Waste Management Unit was added after the VSI. The sump within this area was not previously documented in any information reviewed prior to the VSI. The sump is 6.76 sq.ft. and is square in shape. The sump has steel grid and does not appear to have any secondary containment. This sump is used for run-off of any liquids which may accumulate within the loading/unloading area.
The sump is pumped out periodically when filled and the sump sludge is stored in fifty-five gallons drums and stored in the drum storage area (SWMU #15) prior to being transported off-site.

3.20 GENERAL CONCLUSIONS

This facility has been in operation since 1958. Prior to 1958 dating back to 1952 two other oil operations were being conducted at this site. The concerns at this facility are soil and ground water contamination. Historically, the Facility has no secondary containment within the process areas such as the Tank Farm and any associated ancillary equipment. The Facility has been

documented by several inspections as well as the VSI which verified spills due to poor housekeeping practices and poor condition of tanks. Due to the age of the site, poor condition of the tanks which themselves are approximately fifty years of age or older, soil contamination previously identified, visual evidence of soil contamination during the VSI and sampling activity Dico's activities may pose a significant threat to ground water. – key - what about grass surface contamination !!?

It is therefore recommended that a sampling visit be conducted as part of the RFA. It is therefore recommended that the Facility conduct a RCRA Facility Investigation which includes a soil vapor assessment, soil matrix sampling and vadose zone transport modeling. The RFI should also address a full assessment of the nature and extent of the soil contamination both laterally and vertically.

4.0 CONCLUSIONS

After conducting the VSI, the following observations were made:

4.1 SWMU #1 - PROCESS TANK T1

The entire tank farm area where this tanks is located should be characterized for soil contamination based on apparent soil contamination observed during the VSI and observations made of tanks in this area imploding or having questionable integrity. It is also recommended that this tank be tested for structural integrity due to the age and condition noted during the VSI. It is recommended that a RCRA Facility Investigation be conducted to include both soil and ground water investigations.

4.2 SWMU #2 - PROCESS TANK T2

The entire tank farm area where this tank is located should be characterized for soil contamination based on apparent soil contamination observed during the VSI and observations made of tanks in this area imploding or having questionable integrity.

Based on the results of the VSI sampling activity (sample #5) taken within five feet of this tank, the VSI analytical results produced high concentrations of total petroleum hydrocarbons of 4,300 ppm. It is also recommended that this tank be tested for structural integrity due to the age and condition noted during the VSI. It is recommended that a RCRA Facility Investigation be conducted to include both soil and ground water investigations.

4.3 SWMU #3 - PROCESS TANK T3

The entire tank farm area where this tank is located should be characterized for soil contamination based on apparent soil contamination observed during the VSI and observations made of tanks in this area imploding or having questionable integrity.

Based on the results of the VSI sampling activity (sample #5) taken within five feet of this tank. The VSI analytical results produced high concentrations of total petroleum hydrocarbons of 4,300 ppm. It is also recommended that this tank be tested for structural integrity due to the age and condition noted during the VSI. It is recommended that a RCRA Facility Investigation be conducted to include both soil and ground water investigations.

4.4 SWMU #4 - PROCESS TANK T4

The entire tank farm area where this tank is located should be characterized for soil contamination. A RCRA Facility Investigation should be conducted based on apparent soil contamination observed during the VSI and observations made of tanks in this area imploding or having questionable integrity.

Based on the results of the past sampling and VSI sampling activity (sample #4) taken within two feet of the base of this tank, the VSI analytical results produced high concentrations of total petroleum hydrocarbons of 17,000 ppm. It is also recommended that this tank be tested for structural integrity due to the age and condition noted in which this tank was found to be leaking during the VSI. It was also recommended by the Department that this tank be taken out of service until it is integrity tested.

4.5 SWMU #5 - PROCESS TANK TA5

The entire tank farm area where this tank is located should be characterized for soil contamination through a RCRA Facility Investigation. During the VSI, observations made of tanks in this area imploding or having questionable integrity.

Based on the results of the past sampling and VSI sampling activity (sample #6) taken within two feet of the base of this tank, the VSI analytical results produced high concentrations of total petroleum hydrocarbons of 29,000 ppm. It is also recommended that this tank be tested for structural integrity due to the age and condition. During the VSI it was noted that this tank has a history of leaks and was taken out of service in 1992. It is also recommended that this tank be removed and replaced due to the circumstances in which it would most likely not pass integrity testing.

4.6 SWMU #6 - PROCESS TANK TB

The entire tank farm area where this tank is located should be characterized for soil contamination to be included in a RCRA Facility Investigation. Based on apparent soil contamination observed during the VSI and observations made of tanks in this area imploding or having questionable integrity. It is also recommended that this tank be tested for structural integrity due to the age and condition noted during the VSI.

4.7 SWMU #7 - GUN BARREL TANK/STORAGE TANKs

This SWMU was deleted from the list after conducting the VSI. It was discovered that this tank is the same as Tank TA5 (SWMU #5).

4.8 SWMU #8 - TANK PIT AREA #1 from (REMOVAL OF UGST)

The entire tank farm area which includes Tank Pit #1 is located, should be characterized for soil contamination based on apparent soil contamination observed during the VSI and observations made in this area. Based on the results of the past sampling and VSI sampling activity (sample #7) taken within two feet of the area where a 10,500 gallon underground storage half-tank was located, the VSI analytical results produced high concentrations of total petroleum hydrocarbons of 23,000 ppm. It is also recommended that a RCRA Facility Investigation which includes ground water to be conducted within the entire tank farm where this area is located.

4.9 SWMU #9 - TANK PIT AREA #2 from (REMOVAL OF UGST)

The entire tank farm which includes Tank Pit #2 is located, should be characterized for soil contamination based on apparent soil contamination observed during the VSI and observations made in the general area. Based on the results of the past sampling and VSI sampling activity (sample #7) taken within two feet of the area where a 10,500 gallon underground storage half-tank was located, the VSI analytical results produced high concentrations of total petroleum hydrocarbons of 23,000 ppm. It is also recommended that a RCRA Facility Investigation be conducted which includes a ground water investigation and soil characterization be conducted within the entire tank farm.

4.10 SWMU #10 - TRENCH WITHIN TANK FARM

The entire tank farm area where this trench is located should be characterized for soil contamination based on apparent soil contamination observed during the VSI and observations made of in this area during past inspections conducted by the Department. Based on the results of the past sampling which documented a release of PCBs to soil within this trench. The VSI sampling activity (sample #s 1,2 and 3) which were taken within three different areas of the trench. The VSI analytical results produced high concentrations of total petroleum hydrocarbons of 69,000 ppm for one of the three sample that was collected within the trench located at the base of tank's T2 and T3 (SWMU #s 2 & 3). It is also recommended that a RCRA Facility

Investigation be conducted which includes ground water to be conducted within the entire tank farm where this trench is located due to the high concentrations of PCBs and TPH soil contamination.

4.11 SWMU #11 - BERM SURROUNDING TANK FARM

The entire tank farm area where this berm is located should be characterized for soil contamination based on the history of the soil contained on the berm and observations made during the VSI in this area. Based on the results of the past sampling and VSI sampling activity (sample #8) taken on the northwest side of the berm within two feet of the base. The VSI analytical results produced a concentration 690 ppm of total petroleum hydrocarbons. It is also recommended that a RCRA Facility Investigation be conducted which includes ground water and soil characterization within the entire tank farm where this soil berm is located.

4.12 SWMU #12 - TRUCK LOADING/UNLOADING AREA

The entire tank farm area next to this loading/unloading area should be characterized for soil contamination based on the history of the soil's past sampling and observations made during the VSI in this area. This area is of concern because even though the area is presently overlaid with concrete in 1993, trucks would load and off-load in this area when the area was unpaved. No documented soil sampling is available to verify samples were taken and found non-hazardous prior to laying concrete, which likely resulted in soil being contaminated.

Therefore, this area should be characterized for possible soil contamination. Based on the results of the past sampling and VSI sampling activity that occurred within the adjacent tank farm the VSI analytical results produced high concentrations of TPH ranging from 690 ppm to 69,000 ppm of TPH. It is also recommended that a RCRA Facility Investigation be conducted including ground water investigations within the entire tank farm and adjacent areas.

4.13 SWMU #14 - WASTE PILE OF SOIL

The waste pile of soil that was documented in an inspection report that was prepared by the Department of Toxic Substances Control indicated that a waste pile of soil had been located at the facility. The report did not specify any details as to the amount or purpose of the soil being held at the facility. During the VSI Dick Cowan, Owner/Operator of the facility did state that a waste pile of soil had previously been stored at the facility but was removed as of 3/30/94. The facility will provide documentation for when the soil was removed from the facility.

Therefore due to the waste pile of soil already removed from the facility the day the VSI occurred, no recommendation will be made related to this unit.

4.14 SWMU #14 - PIPING SYSTEM

The entire piping system contained within the tank farm and adjacent areas needs to be tested for structural integrity due to age and a visual inspection. The piping, historically has been documented and observed to have leaks in several different areas throughout the Facility. It is unknown as to exactly how long certain pipes have been leaking at the site. The soil located near and around the leaking pipes should be characterized for soil contamination.

It is recommended that the entire piping system be tested for structural integrity due to the age and condition noted during the VSI. It is recommended that a RCRA Facility Investigation be conducted to include both soil and ground water investigations due to documented release of oil leaking on to ground from the piping system.

4.15 SWMU #15 - HAZARDOUS WASTE DRUM STORAGE AREA

The hazardous waste/material drum storage area which is adjacent to the loading/unloading area (SWMU #12) should be characterized for soil contamination based on the observations made during the VSI in this area. This area is of concern because even though the area is presently overlaid with concrete, there is no berm, slope or sump for proper containment of any runoff which may occur within this area. Trucks would load and off-load in the area adjacent to this drum storage area. The area of the drum storage which is adjacent to the property boundary has no cement to prevent run off from the Facility or on to the soil contained within Facility.

No documented soil sampling is available to verify samples were taken and found non-hazardous prior to laying concrete, which likely resulted in soil being contaminated. Therefore, this area should be characterized for possible soil contamination. It is also recommended that a RCRA Facility Investigation be conducted including soil characterization within the drum storage area.

4.16 SWMU #16 - LABORATORY/SATELLITE ACCUMULATION AREA

The laboratory and satellite accumulation area is covered and has wooden floor. It is recommended since this area was found to be of minimal concern, that a soil sample should be taken to verify that no soil contamination has occurred near this area.

4.17 & 4.18 SWMU # 17 & 18 - PCB SOIL CONTAMINATION AREAS

The entire tank farm and trench area should be characterized for soil contamination based on documentation of sampling results indicating high concentrations of PCB soil contamination and observations made during the VSI. Based on the results of the past sampling conducted by DTSC, which documented a release of PCBs to soil within this trench and on the west side of the driveway.

During the VSI sampling activity (sample #s 1,2 and 3) three samples were extracted from three different areas of the trench. The VSI analytical results produced high concentrations of total petroleum hydrocarbons of 69,000 ppm for one of the three sample that was collected within the trench located at the base of tank's T2 and T3 (SWMU #s 2 & 3). It is recommended that a RCRA Facility Investigation be conducted which includes characterization of soil and ground water within the entire tank farm area and west side of the driveway where PCB contamination was documented on-site.

4.19 SWMU # 19 - SUMP in LOADING/UNLOADING AREA

This Solid Waste Management Unit was added after the VSI. This sump is used for run-off of any liquids which may accumulate within the loading/unloading area. The sump is pumped out periodically and is
It is recommended that since this unit is of minimal concern that a sample be taken to verify no contamination has occurred

4.20 GENERAL CONCERNS

The concerns at this facility are soil and ground water contamination. Historically, the Facility has no secondary containment within the process areas such as the Tank Farm and any associated ancillary equipment. The Facility has been documented by several inspections and during the VSI verifying spills due to poor housekeeping practices and poor condition and age of tanks.

Due to the age of the site, poor condition of the tanks which themselves are approximately fifty years of age or older, soil contamination previously identified containing high concentrations of TPH and PCB, visual evidence of contamination during the VSI and sampling activity, Dico's activities may pose a significant threat to ground water. It is therefore recommended that a sampling visit be conducted as part of the RFA. It is therefore recommended that the Facility conduct a RCRA Facility Investigation which includes a soil vapor assessment, soil matrix sampling and vadose zone transport modeling. The RFI should also address a full assessment of the nature and extent of the soil contamination both laterally and vertically.

wrap-up.